

IATA
GLOBAL
MEDIA DAY

Safety and Operational Risk Mitigation

Nick Careen
SVP Operations, Safety & Security

#IATAGMD



Safety Briefing Topics

- 2023 Global Safety Performance Update
- ICAO Annex 13 Investigations
- IATA Safety Leadership Charter
- Risk-Based IOSA
- IATA Safety Issue Hub
- Hot Topics:
 - GNSS Interference/Spoofing
 - Runway Safety



Hello again.

As you can see, we have a pretty full agenda and I realize that I'm standing between you and the bar, so I'm going to run through these fairly quickly and I'll be happy to take your questions at the end.

All Accident Rate per Region of Operator



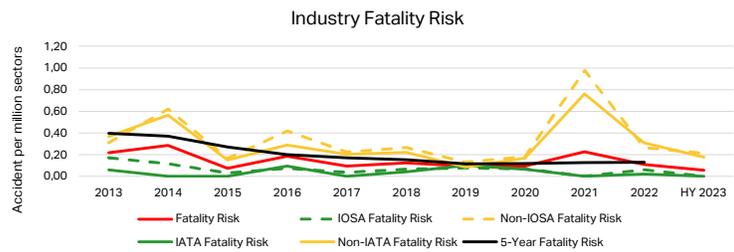
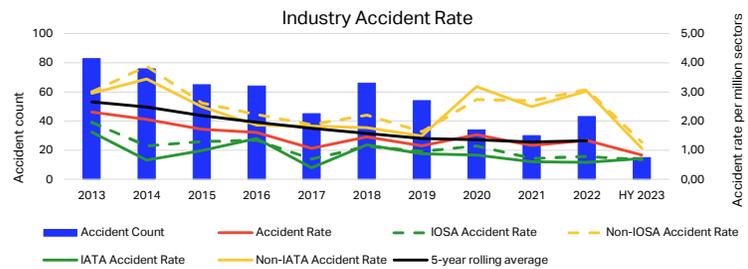
Accident categories during the period from 2018 to HY 2023:

- Runway Excursions are a common type of occurrence:
- but Loss of Control Inflight (LOC-I) remains the highest fatality risk.

Source: IATA Safety report – Mid-Year 2023

- Six regions saw improved safety performance In the first half of 2023 compared to 2022.
- Looking at the two areas that have seen an increase in the first 6 months of 2023. In North America, there were 5 accidents in the first half of the year, all of which involved substantial damage to the aircraft but none of which resulted in a hull loss These included a tail strike, ground damage, hard landing, in-flight damage (hail), and landing gear collapse.
- Asia-Pacific experienced 2 accidents in the 2023 first half, including the fatal accident already mentioned and a tail strike.
- Both regions' first-half performance declined compared to the previous full year but were improved compared to the five year average.
- We also see an increase in accidents to IATA Members in the first half of 2023. None of these accidents involved fatalities or a hull loss. The accident rate in the first half of 2023 exceeded the full year 2022 rate but was below the 5-year average.
- While the ongoing long term improvements in safety performance are encouraging, continuous efforts and vigilance are required to sustain and further enhance safety levels in the aviation industry.

15 accidents were reported in the first half of 2023, one of which was fatal. With 18.2 million sectors flown in this period, air transport remains the safest mode of travel with 0.82 accidents per million sectors.



Source: IATA Safety report – Mid-Year 2023

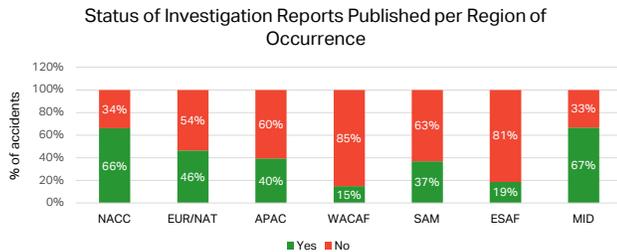
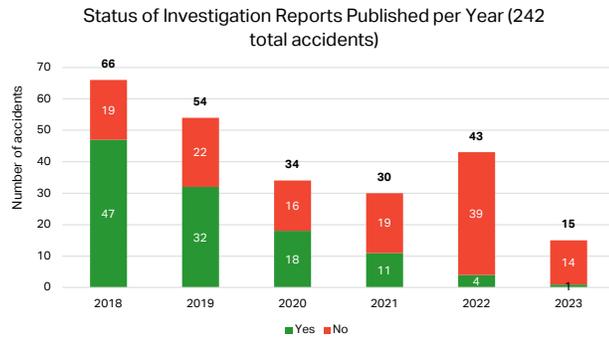


- As you can see from this chart, the accident data from the first half of 2023, while it only represents 6 months, compares generally well with the rolling average of the past 5 years (2018-2022).
- There was one fatal accident.*
- Should this trend continue in the second half of the year, we will experience another year of improving safety performance.

* Yeti Airlines ATR 72 turboprop, 15 January 2023. The accident occurred while the aircraft was on approach to Pokhara, Nepal. All 72 persons onboard were killed in the accident.

ICAO Annex 13 Accident Investigations

ICAO Annex 13 provides clear timelines for the publication of accident investigation reports, **but** these are not being universally complied with.

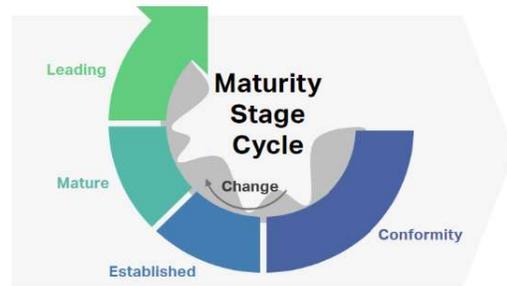


- To be able to continuously move safety forward, the airline industry needs to learn from its past accidents and incidents.
- It is unacceptable that the lowest area of compliance by International Civil Aviation Organization (ICAO) member states, according to ICAO's Universal Safety Audit Oversight Program, continues to be the area of accident investigations. IATA calls on ICAO and member states to deliver timely and comprehensive accident reports, in accordance with ICAO Annex 13 Aircraft Accident and Incident Investigation standards.
- To support this, IATA is tracking the publishing and quality of accident reports, and will work with industry partners to facilitate training for accident investigators to improve their skills
- At the 2024 ICAO High-Level Conference, IATA will strive for better investigations to foster a proactive approach towards accident prevention.
- Regional abbreviations: NACC: North America, Central America, and Caribbean; EUR/NAT: Europe and North Atlantic; APAC; Asia Pacific; WACAF: Western and Central Africa; SAM: South America; ESAF: Eastern and Southern Africa; MID: Middle East

Risk-Based IOSA

Delivering bespoke risk-based audits across the IOSA Registry

- Roll-out of risk-based audits to all IOSA operators by 2025 on target.
- Audit results, and non-compliances identified, more focused on individual airline's operation.
- Safety insights used to identify future IATA safety activities.
- Well received by operators and regulators alike.
- New tools, such as IOSA Platform, being developed for greater airline collaboration to manage safety risks.

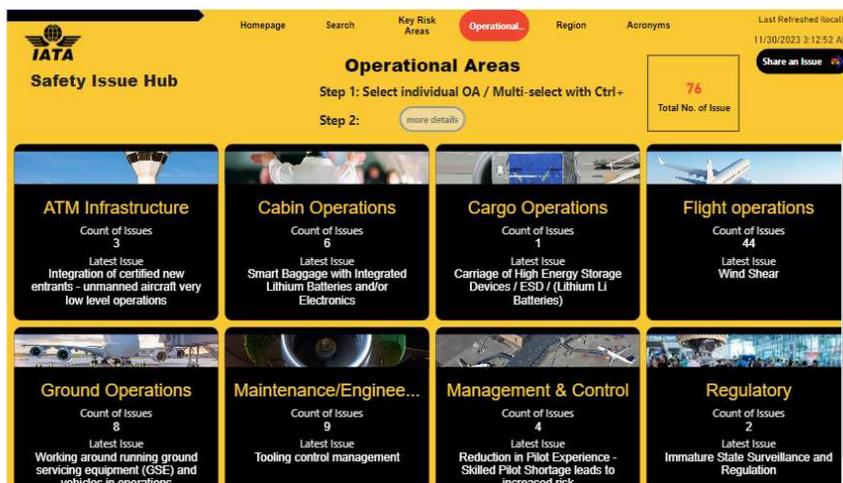


"Maturity Assessment" support understanding of SMS implementation, and other critical systems, going beyond ISARP compliance.



- 2023 marks the 20-year anniversary of the launch of the IATA Operational Safety Audit or IOSA.
- Last year, we began evolving IOSA to a [risk-based model](#) under which audits are tailored to the operator's profile and focusing on high-risk areas. The new approach also introduces a maturity assessment of the airline's safety-critical systems and programs.
- After a successful trial period, we begin introducing risk-based audits this year. We are on target to complete 25 risk-based audits in 2023.
- We expect to deliver 100 risk-based audits in 2024 and 220+ from 2025, when the transition is completed. From that point forward all audits will follow the risk-based template.
- Feedback received from operators and regulators has been very positive.
- New audit method and engagement with auditors leads to more non-compliances identified and more meaningful audit results.
- There is strong collaboration with the US FAA, EASA, CASA Australia and the CAA, who have expressed their support for the risk-based approach.
- As IATA scales up to meet our we will be growing the organization by recruiting auditors and introducing a collaboration platform.
- The collaboration platform will connect airlines, IATA, auditors and regulators in a secure and state-of-the-art environment.

IATA Safety Issue Hub



- Our Safety Strategy is built on 3 pillars: Safety Leadership, Safety Risk & Safety Connect.
- The Safety Risk pillar centers on the IATA Safety Issue Hub, which aims to become a comprehensive repository of aviation hazards and safety risks.
- It will enable the prioritization and delivery of aviation safety improvement programs, for the benefit of reducing global accidents in aviation.
- Data sharing and industry insight is key to maintaining growth and understanding of the global risk picture
- We are looking at how we can establish a link between the Safety Issue Hub and our Safety Connect initiative, which is intended to encourage active communication among airlines' safety and compliance managers on matters.
- This will enable greater interaction and industry discussion and provide IATA with greater insight, while encouraging global sharing.
- In the next few slides I'll run through some of the "hot topics" of the day coming through the Safety Issue Hub.

GNSS Interference

The Issue:

"Spoofing or jamming of GNSS signals impacting aircraft systems resulting in misleading or the unavailability of navigation and/or surveillance information"

Key Factors:

- Exacerbated by global conflicts
- Impacts numerous airlines operations
- Outages becoming longer in duration
- GPS relied on for several aircraft systems

Current Activity



IATA continues to monitor the issue and implement recommendations within its Safety Risk Assessment (SRA) where recommendations include:

- IATA encourages operators to review the mitigations and controls, listed in the SRA, and to check against their own assessment
- Promote the importance of reporting loss of GNSS events to ensure the extent of the issue is fully recognized
- Influence OEMs to provide guidance on increasing the resilience of equipment to jamming

The full SRA can be viewed on the IATA Safety Issue Hub



GNSS – The risk that has been articulated by IATA is on the left and covers the current situation of increased spoofing and the impact on navigational and surveillance information. There are more factors which drive GNSS interference, with some of the most common highlighted here.

Actions – through the safety governance the GNSS issue is routinely reviewed to understand the global picture, an overview of the activities are included.

Runway Safety

The Issue:

“The safe operation of aircraft on the runway surface during take-off and landing”

This issue may lead to runway excursions, incursions, collisions, hard landings, tail strikes, and others.

Current Activity



IATA continues to monitor this safety issue and implement recommendations from the Runway Safety [Detailed Implementation Plan](#) on IATA.org



Key risk factors impacting runway safety include but are not limited too: ` Unstable approaches, abnormal runway contact, operation in adverse weather conditions, non-adherence to Standard Operation Procedures, airport facilities (runway conditions, markings and signage), air traffic control / pilot communication, inadequate safety management and regulatory oversight

IATA's activities include:

- Encourage participation in safety information sharing programs and collaborative safety groups.
- Develop high risk unstable approach criteria and guidance for the industry
- Promote the IATA / IFALPA / CANSO / IFATCA Risk Mitigation Policies, Procedures and Best Practices Guidance Material
- Enhanced Competency Based Training and Assessment (CBTA) training implementation and SOP adherence
- Develop and promote the new Global Action Plan for the Prevention of Runway Excursions (GAPPRE) and Incursion (EAPPRI)

Runway Safety is an ongoing challenge, not just in terms of Runway excursion but also Runway incursion. There have been a number of high-profile incidents in the US which could be classed as Runway Incursions, but also include runway occupancy issues such as when two aircraft are cleared to utilize the same runway at the same time.

Several of these events are under investigation. A significant shortage of fully trained controllers has been identified as a serious issue in the US that has cascading effects on the performance of the US Air Traffic Control Organization such as the use of extensive over-time requirements for controllers, potentially leading to over-fatigue and employee burnout.

Runway Excursion, is a key risk area, with many reasons, symptoms and outcomes, of note IATA is concentrating on promoting better practice to resolve unstable approaches such as the use of go-arounds and enhancements to pilot training to ensure that conditions which could result in runway excursion are included in the training syllabus or training is modeled on CBTA principles.